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KO-Validated Anti-Caveolin 1 Rabbit Monoclonal Antibody

Rabbit monoclonal antibody
Catalog # AGI2418

Specification

KO-Validated Anti-Caveolin 1 Rabbit Monoclonal Antibody - Product Information

Application	**WB**
Primary Accession	Q03135
Reactivity	**Human, Mouse**
Clonality	**Monoclonal**
Isotype	**Rabbit IgG**
Calculated MW	**Predicted, 20 kDa, observed, 20,24 kDa KDa**
Gene Name	**CAV1**
Aliases	**CAV1; Caveolin 1; Caveolin 1, Caveolae Protein, 22kDa; Caveolin-1; CAV; Caveolin 1, Caveolae Protein, 22kD; Cell Growth-Inhibiting Protein 32; MSTP085; BSCL3; LCCNS; VIP21; CGL3; PPH3**
Immunogen	**A synthesized peptide derived from human Caveolin-1**

KO-Validated Anti-Caveolin 1 Rabbit Monoclonal Antibody - Additional Information

Gene ID	**857**

Other Names
Caveolin-1, CAV1, CAV

KO-Validated Anti-Caveolin 1 Rabbit Monoclonal Antibody - Protein Information

Name CAV1

Synonyms CAV

Function
May act as a scaffolding protein within caveolar membranes (PubMed:11751885). Forms a stable heterooligomeric complex with CAV2 that targets to lipid rafts and drives caveolae formation. Mediates the recruitment of CAVIN proteins (CAVIN1/2/3/4) to the caveolae (PubMed:19262564). Interacts directly with G-protein alpha subunits and can functionally regulate their activity (By similarity). Involved in the costimulatory signal essential for T-cell receptor (TCR)-mediated T-cell activation. Its binding to DPP4 induces T-cell proliferation and NF-kappa-B activation in a T-cell receptor/CD3-dependent manner (PubMed:17287217). Recruits CTNNB1 to caveolar membranes and may regulate CTNNB1-mediated signaling through the Wnt pathway (By similarity). Negatively regulates TGFB1-mediated activation of SMAD2/3 by mediating the internalization of TGFBR1 from membrane rafts leading to its subsequent degradation (PubMed:<a

href="http://www.uniprot.org/citations/25893292" target="_blank">25893292). Binds 20(S)-hydroxycholesterol (20(S)-OHC) (By similarity).

Cellular Location
Golgi apparatus membrane; Peripheral membrane protein. Cell membrane; Peripheral membrane protein. Membrane, caveola; Peripheral membrane protein. Membrane raft. Golgi apparatus, trans-Golgi network {ECO:0000250|UniProtKB:P33724} Note=Colocalized with DPP4 in membrane rafts. Potential hairpin-like structure in the membrane. Membrane protein of caveolae

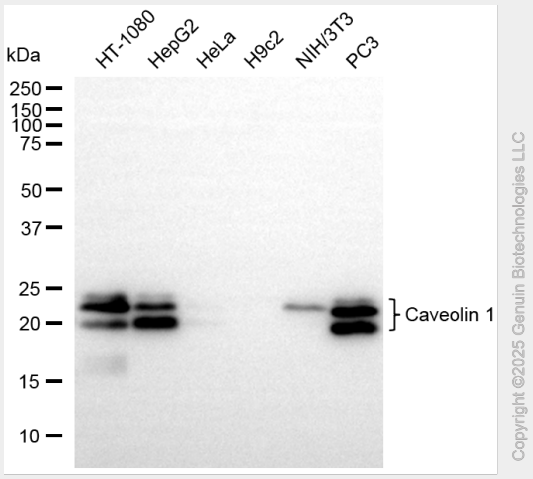
Tissue Location
Skeletal muscle, liver, stomach, lung, kidney and heart (at protein level). Expressed in the brain

KO-Validated Anti-Caveolin 1 Rabbit Monoclonal Antibody - Protocols

Provided below are standard protocols that you may find useful for product applications.

- Western Blot
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- Cell Culture

KO-Validated Anti-Caveolin 1 Rabbit Monoclonal Antibody - Images



Western blotting analysis using anti-Caveolin 1 antibody (Cat#AGI2418). Total cell lysates (5 µg) from various cell lines were loaded and separated by SDS-PAGE. The blot was incubated with anti-Caveolin 1 antibody (Cat#AGI2418, 1:5,000) and HRP-conjugated goat anti-rabbit secondary antibody respectively.

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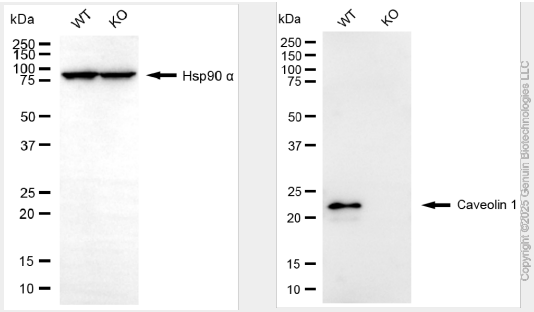

Western blotting analysis using anti-caveolin 1 antibody (Cat#AGI2418). Caveolin 1 expression in wild-type (WT) and caveolin 1 (CAV1) knockout (KO) 293T cells with 30 µg of total cell lysates. Hsp90 α serves as a loading control. The blot was incubated with anti-caveolin 1 antibody (Cat#AGI2418, 1:5,000) and HRP-conjugated goat anti-rabbit secondary antibody respectively.